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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,332

08/17/2005

Francesc Daura Luna

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EXAMINER

TWEEL JR, JOHN ALEXANDER

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

07/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/521,332

Applicant(s)

DAURA LUNA ET AL.

Examiner

John A. Tweel, Jr.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 38-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38,40,41,53,54,57,66,68,69 and 72 is/are rejected.
- 7) ☒ Claim(s) 39,42-52,55,56,58-65,67,70 and 71 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/18/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:
  - Page 3, Line 11: The Examiner is not familiar with the term "saloon car". Is this a certain type of vehicle?
  - Page 3, Line 22: This line contains a European spelling of the word --maneuver--.
  - Page 4, Line 25: The word "Preferable" should be replaced by --Preferably--.
  - Page 5, Line 38: The word --various-- has been misspelled in this line.Appropriate correction is required.

### ***Claim Objections***

2. Claim 38 is objected to because of the following informalities: Line 14 of the claim needs a word such as --in-- before the phrase "the visible". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 38, 40, 54, 57, 68, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Whitted** [U.S. 6,803,858] in view of **Winner et al** [U.S. 6,580,385].

For claim 38, the active monitoring device within a safety perimeter of a motor vehicle taught by Whitted includes the following claimed subject matter, as noted, 1) the claimed first detector is met by the first sensor (No. 102a) which has a first detection angle which covers a first detection zone that includes at least part of a blind angle of the vehicle (Col. 2, Lns. 9-12) that transmits input signals to at least one data processing device (Nos. 104, 106, 107) that generates output signals, 2) the claimed second detector is met by the second sensor (No. 102b) which has a second detection angle and forms a group with the first sensor to cover a combined detection zone being enlarged with respect to that covered by the first sensor, wherein said first and second sensors share the same warning means (Nos. 108 and 110) that are activated via the processing of the output signals from each one. However, there is no mention of an optical camera operating in the visible and/or infrared spectra.

The object detection system taught by Winner includes a stereoscopic camera that may be used for a detection zone. This reference is plain evidence that cameras have been used to detect objects within a zone around a vehicle for some time. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a camera in the system of Whitted for the purpose of using a well known and common detection apparatus.

For claim 40, the first and second sensors of Whitted are arranged to point toward a blind spot near the rear of the vehicle in the area of the turn signals (Col. 2, Ln. 14).

For claim 54, logic circuits have been used in electronic processing for some time. The inclusion of "OR" logic is not considered a patentable innovation as such logic processing has been used in electronics for many different purposes.

For claim 57, the Figure of Whitted displays the two sensors directly connected to a data processing device forming part of a single integrated circuit.

For claim 68, the active monitoring method within a safety perimeter of a motor vehicle taught by Whitted includes the following claimed steps, as noted, 1) the claimed acquiring data from at least two differentiated detection zones is achieved using the first and second sensors (Nos. 102a and 102b) having two detectors covering a zone which is contiguous and includes a sector of a safety perimeter, 2) the claimed processing the signals is achieved using the processing apparatus (Nos. 104, 106, 107), and 3) the claimed generating warning signals is achieved using the warning means (Nos. 108 and 110) in case of detecting an object involving risk. The inclusion of "OR" logic is not considered a patentable innovation as such logic processing has been used in electronics for many different purposes. However, there is no mention of the detectors being an optical camera for working in the visible or infrared spectra.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 38 above.

For claim 72, the specification of Whitted mentions using a plurality of sensor combinations (Col. 2, Lns. 12-19) to cover several sectors of the safety perimeter.

5. Claims 41, 53, 66, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Whitted** in view of **Winner et al** as applied to claim 38 above, and further in view of **Schofield et al** [U.S. 5,929,786].

For claim 41, the combination of references above includes the claimed subject matter as discussed in the rejection of claim 38 above. However, there is no mention of processing each of the input signals simultaneously and separately.

The vehicle blind spot detection display system detects two separate blind spot areas using sensors (No. 20) mounted on the side rear view mirrors. The sensors are used to alert the driver to separate indications of object detection on separate sides of the automobile. The obvious advantage of this system is to provide a clear indication to the driver as to the exact location of a potential collision or infraction.

As all three references pertain to similar subject matter, that is, the detection of objects in a safety perimeter of an automobile, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include separate detection of input signals for the purpose of providing clear indication to the driver.

For claim 53, the two sensors of Schofield are installed in the structure of outside rear-view mirrors on the motor vehicle.

For claim 66, the system of Schofield includes a display device for displaying indications from the detector.

For claim 69, the claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 41 above.

6. Claims 39, 42-52, 55, 56, 58-65, 67, 70, and 71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Each objected dependent claim includes subject matter not found in an obvious combination in the prior art, such as the differential processing as a function of the vehicle's speed or the specific coverage area as a function of the second sensor in relation to the first as seen in claims 42-44. These are considered unobvious when compared to the prior art.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Asanuma et al** [U.S. 5,172,317] permits determination of a permissible traveling area.

**Takubo et al** [U.S. 6,288,774] uses markers and measures distances from an object.

**Uselmann et al** [U.S. 6,727,808] alerts a driver when a vehicle is positioned in a blind spot.

**Anderson et al** [U.S. 6,927,677] uses infrared LEDs in a blind spot detector system.

**Takahashi** [U.S. 7,061,373] uses a plurality of sensors to handle situation when obstacles exist in a blind spot.

**Strumolo et al** [U.S. 7,161,472] provides an indication of a vehicle entering a blind spot.

**Taniguchi et al** [U.S. 7,233,233] recognizes a pedestrian using IR cameras.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 571 272 2969. The examiner can normally be reached on M-F 10-6:30.

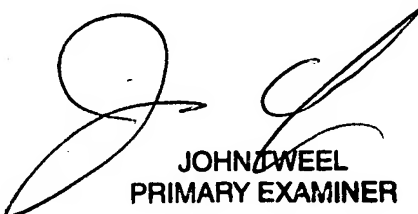
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571 272 2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAT  
7/22/07



JOHN DWEEL  
PRIMARY EXAMINER